

REMARKS

Claims 1 – 19 and 21 – 42 have been examined. Claims 5, 19, and 20 have been canceled; and Claims 1 – 3, 6 – 18, 21 – 24, 27, 29 – 31, 33 – 35, 37 – 39, and 41 have been amended.

1. Specification

The specification has been amended to provide application numbers that were unavailable at the time of filing.

2. Restriction

The Office Action indicates that Species A1 and B2 were elected in the Response filed August 23, 2004, but the Response actually elected Species A2 and B1 (*see* Response filed August 23, 2004, p. 4). Since the claims corresponding to both species B1 and B2 were examined, and since Claim 20 readable on Species A2 has been canceled, it is believed that any inconsistency between the Response and the Office Action is moot.

3. Claim Objections

The Office Action objects to Claims 17 and 18 as being inconsistent with Claim 1 and thereby not further limiting the subject matter of a claim from which they depend. Claim 1 has been amended to recite that the silicate glass optical cores are formed “over” the undercladding layer, thereby embracing both the embodiments shown in Figs. 7A – 7E and Figs. 8A – 8E. Claims 15 – 16 now include limitations that embrace the embodiment shown in Figs. 7A – 7E in which a substantially continuous optical core layer is deposited “on” the undercladding layer, with a sequence of gaps etched in the optical core layer. Claims 17 – 18 include limitations that embrace the embodiment shown in Figs. 8A – 8E in which silicate glass is deposited in trenches formed within the undercladding layer, with the cores still being formed “over” the undercladding layer such as illustrated in Fig. 8D.

4. Claims Rejections

Several amendments have been made to the claims to better define aspects of the invention. In making these amendments, care has been taken to address each of the §112 rejections that was identified. In addition, each of the claims now requires the formation of a high-density plasma and deposition of a plurality of separated silicate glass optical cores using the high-density plasma on an undercladding layer. Each of the silicate glass optical cores is formed with a refractive index greater than a refractive index of the undercladding layer. The combination of limitations now recited is neither taught nor suggested by the cited prior art.

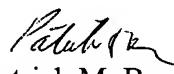
Examination of the claims as amended is respectfully requested.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,


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